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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,668	02/06/2004	Norbert Keim	10191/3576	7528
26646	7590	08/31/2006	EXAMINER	
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			NGUYEN, CUONG H	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/773,668	<b>Applicant(s)</b> KEIM ET AL.	
	<b>Examiner</b> CUONG H. NGUYEN	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-11 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/06/04</u> , <u>3/29/05</u> | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

1. This Office Action is the answer to the IDS received on 2/06/04/04, which paper has been placed of record in the file.
2. Claims 1-11 are pending in this application.

***Drawings***

3. The submitted formal drawings are acceptable for examining purposes.

***Priority***

4. The application claims a Germany priority of 10304711.5 on 2/06/2003.

***Claim Rejections - 35 USC § 112***

5. Claim 1 cites “altering a clock frequency of the trigger signal by the control device as a function of a performance quantity of the electromagnetic valve”; the examiner respectfully submits that the specification does not say who/how to alter that frequency; according to a well-known feedback signal for PWM circuits, this is automatically done (that presumably answers for a “who” question; however, the question “how” should be elaborated further so that one with ordinary skill in the art can duplicate this invention without trial and error – currently, it is vague and unclear, that is, how to alter a clock frequency of claimed circuit and what is a claimed “a performance quantity” (is it a speed of closing said “electromagnetic valve”, is it a quality/degree of “valve closing”?, is it about a degree of promptly response for a command? , this is essential to the claimed invention but not elaborated in the claim.
6. Claim 3 comprises a feature of “the clock frequency depends on ... current...”, this is unclear of how a definition of “depends on”.

7. Claim 2 comprises a feature of “the method is for an automatic transmission of a motor vehicle”; it is unclear how controlling an electromagnetic valve relate to a transmission.

8. Claims 3-9 are rejected on 35 USC 112, 2<sup>nd</sup> para. because the format for a method claim is not conformed – for clarity, please make corrections according to formats that present in pending claims 10-11.

Since this is a utility patent, the claims must be directed to systems, methods or articles of manufacture that have a clear utility. See MPEP 706.03(a) for example. Over the years, numerous court decisions have analyzed the content of various claimed language for meaningful, useful differences in structure or acts performed between the claims and the prior art. Some of these decision have found that certain language adds little, if anything, to the claimed structure or acts and thus do not serve as a limitation on the claims to distinguish over the prior art. For example, language directed to an intended use of dispensing popcorn in a claim for a product did not result in a structural or functional difference with respect to prior art and were held not to serve as a limitation on the claim. See *in re Schreiber*, 44 USPQ2d 1429 (CAFC 1997).

Thus, a limitation on a claim can broadly be thought of as its ability to make a meaningful contribution to the definition of the invention in a claim. In other words, language that is not functionally interrelated with the useful acts, structure, or properties of the claimed invention will not serve as a limitation. See *in re Gulack*, 217 USPQ 401 (CAFC 1983), *ex parte Carver*, 227 USPQ 465 (BdPatApp&Int 1985) and *in re Lowry*, 32 USPQ2d 1031 (CAFC 1994) where language provided certain limitations because of specific relationships required by the claims.).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

**A person shall be entitled to a patent unless –**

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

9. Claims 1-3, and 7 are rejected under 35 U.S.C. § 102(e) as being anticipate by Oashi (US Pat. 6,792,916).

A. As to claim 1: Oashi teaches about a method for controlling an electromagnetic valve (see Oashi, Fig. 2a-2c, and claim 5), comprising:

- triggering a coil of the electromagnetic valve by a control device with a pulse-width modulated trigger signal; and
- altering a clock frequency of the trigger signal by the control device as a function of a performance quantity of the electromagnetic valve (see Oashi, the summary of the invention).

B. As to claim 2: Oashi teaches about a method for controlling an electromagnetic valve, comprising: a feature of the method is for an automatic transmission of a motor vehicle (see Oashi, the summary of the invention, col. 3 lines 1-67).

C. As to claim 3: Oashi teaches about a method for controlling an electromagnetic valve, comprising: the clock frequency depends on at least one of a set point valve current through the coil and an actual valve current through the coil (see Oashi, FIGs. 2A-2C, FIG.4A, AND FIG.4B).

D. As to claim 7: Oashi teaches about a method for controlling an electromagnetic valve, comprising:

the clock frequency depends on a level of a power supply voltage of the electromagnetic valve (see '916 "FIG. 8 shows the results of experiments to determine the ability to withstand the influence of power source voltage at each control frequency."").

### **Conclusions**

10The prior art made of record, which are listed in PTO-892, and not relied upon are considered pertinent to applicant's disclosure.


11 Note: Using PWM is very well known in controlling current of voltage output (e.g., controlling a power supply output with accuracy – a transformer (a coil/inductor) is used in that controlled circuit); this invention is merely use that technique to control a valve (using an actual valve current to feedback).

12 Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-6759. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.

  
CUONG H. NGUYEN  
Primary Examiner  
Art Unit 3661

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